

Application/Control No. 08/857,756

Attorney Docket No. PHN 15,815

AMENDMENTS TO THE CLAIMS

1. (Cancelled)
2. (Currently Amended) A liquid-crystal display device as claimed in Claim [1] ~~16, characterized in that wherein~~ the direction of orientation of the liquid-crystal molecules in the polymerized or vitrified liquid-crystalline material is substantially constant in at least one of the retardation foils.
3. (Currently Amended) A liquid-crystal display device as claimed in Claim [1] ~~16, characterized in that wherein~~ the tilt angle of the liquid-crystal molecules in the polymerized or vitrified liquid-crystalline material varies, in at least one of the retardation foils, in a direction at right angles to the foil.
4. (Currently Amended) A liquid-crystal display device as claimed in Claim 3, ~~characterized in that wherein~~ in the retardation foil, the average tilt angle of the liquid-crystal molecules in the polymerized or vitrified liquid-crystalline material is at least 10 degrees.
5. (Currently Amended) A liquid-crystal display device as claimed in Claim [1] ~~16, characterized in that wherein~~ the tilt angle of the liquid-crystal molecules in the polymerized or vitrified liquid-crystalline material is substantially constant in at least one of the retardation foils.
6. (Currently Amended) A liquid-crystal display device as claimed in Claim [6] ~~16, characterized in that wherein~~ in the retardation foil, the tilt angle of the liquid-crystal molecules in the polymerized or vitrified liquid-crystalline material is at least 10 degrees and at most 70 degrees.
7. (Currently Amended) A liquid-crystal display device as claimed in Claim [1] ~~16, characterized in that wherein~~ the polymerized or vitrified material comprises liquid-crystalline molecules which are provided, at one end, with a non-polar group and, at the other end, with a polar group.

Application/Control No. 08/857,756

Attorney Docket No. PHN 15,815

- 1 8. (Currently Amended) A liquid-crystal display device as claimed in Claim 7, characterized in that wherein at the end provided with the non-polar group, the liquid-crystalline molecules are covalently bonded to the polymerized or vitrified material.
9. (Cancelled)
- 16 10. (Currently Amended) A compensator layer as claimed in Claim ¹⁵ [(9)] 21, characterized in that wherein the direction of orientation of the liquid-crystal molecules in the polymerized or vitrified liquid-crystalline material is substantially constant in at least one of the retardation foils.
- E 1 17 11. (Currently Amended) A compensator layer as claimed in Claim ¹⁵ [(9)] 21, characterized in that wherein the tilt angle of the liquid-crystal molecules in the polymerized or vitrified liquid-crystalline material varies in at least one of the retardation foils.
- 18 12. (Currently Amended) A compensator layer as claimed in Claim ¹⁵ [(9)] 21, characterized in that wherein the tilt angle of the liquid-crystal molecules in the polymerized or vitrified liquid-crystalline material is substantially constant in at least one of the retardation foils.
- 19 13. (Currently Amended) A compensator layer as claimed in Claim ¹⁵ [(9)] 21, characterized in that wherein the polymerized or vitrified material comprises liquid-crystalline molecules which are provided, at one end, with a non-polar group and, at the other end, with a polar group.
- 20 14. (Currently Amended) A compensator layer as claimed in Claim ¹⁹ 13, characterized in that wherein at the end provided with the non-polar group, the liquid-crystalline molecules are covalently bonded to the polymerized or vitrified material.

Application/Control No. 08/857,756

Attorney Docket No. PHN 15,815

15. (Withdrawn) A method of manufacturing a retardation foil, characterized in that a liquid-crystalline mixture in the smectic C-phase between two homeotropically aligning substrates is cured by means of polymerization.

16. (New) A liquid-crystal display device having a display cell comprising:
a layer of a nematic, liquid-crystal material disposed between two substantially parallel substrates, the nematic, liquid-crystal material having a twist angle which lies in a range of 60-120 degrees;
first and second polarizers disposed with the substrates, the first and second polarizers having first and second polarizing directions; and
first and second retardation foils disposed in a predetermined relationship with the first and second polarizers, wherein the first and second retardation foils respectively comprise polymerized or vitrified liquid-crystalline material comprising liquid-crystal molecules which respectively:

- a) have average orientations which respectively extend in first and second directions which directions are respectively parallel to first and second planes that are normal to the substrates, the first and second planes being oriented with respect to one another at an angle in a range of 60 to 120 degrees; and
b) exhibit first and second average tilt angles relative to the substrates.

9 17. (New) A liquid-crystal display as claimed in claim 16, wherein the twist angle of the liquid crystal material lies in one of the ranges of 60 - <90 and >90 - 120 and wherein the angle with which the first and second planes are oriented with respect to one another is essentially the same as the twist angle of the liquid crystal material.

10 18. (New) A liquid-crystal display device as claimed in claim 16, wherein the average tilt angle of the first retardation foil is 40 degrees.

11 19. (New) A liquid-crystal display device as claimed in claim 16, wherein the average tilt angle of the second retardation foil is 40 degrees.

12 20. (New) A liquid-crystal display device as claimed in claim 16, wherein the first and second polarizing directions are oriented at right angles to each other.

